

In the Claims:

subC² 1. (Once amended) An electronic switching apparatus for flexibly
2 interconnecting a plurality of signal endpoints, the apparatus comprising:
3 a first circuit for receiving at least one input signal from at least one
4 input endpoint, the first circuit having at least one barrel shift register coupled
5 to at least one of the at least one input endpoint for receiving the at least one
6 input signal, shifting and rotating the at least one input signal, and
7 transmitting at least one output signal; and
A 8 a second circuit coupled to outputs from the first circuit for sending at
9 least one received signal to at least one output endpoint.

subB¹ 2. (Once amended) The electronic switching apparatus of claim 1, wherein the
2 at least one input signal comprises a data signal that is received in serial form
3 including a plurality of data channels interleaved therein.

1 3. (Once amended) The electronic switching apparatus of claim 2, wherein the
2 second circuit further comprises at least one multiplexer selectably coupled to
3 the at least one barrel shift register thereby effectively enabling digital signal
4 switching simultaneously between the at least one input endpoint and the at
5 least one output endpoint.

1 4. (Once amended) The electronic switching apparatus of claim 1, wherein the
2 at least one input signal comprises a data signal that is received in parallel
3 form and converted to serial form.

1 5. (Once amended) The electronic switching apparatus of claim 2, wherein the
2 barrel shift register interconnects a plurality of received input signals at
3 different times.

Sub 1
Cov 1
A 1
1 6. (Once amended) The electronic switching apparatus of claim 1, wherein the
2 at least one input endpoint or the at least one output endpoint corresponds to
3 at least one pin for a coder/decoder (codec) device, such codec device being
4 compliant with an AC97 or an I2S convention.

Sub 3
1 7. (Once amended) A method for electronic signal coupling, the method
2 comprising the steps of:
3 receiving a first set of digital signals, the received first set of digital
4 signals being provided to a plurality of barrel shift registers;
5 shifting and rotating the first set of digital signals; and
6 transmitting a second set of digital signals, the transmitted second set of
7 digital signals being provided from a plurality of multiplexers, the plurality of
8 multiplexers being selectably coupled to the barrel shift registers such that at
9 least one signal selected in the first set of digital signals is selectably coupled
10 for transmission in the second set of digital signals.

Sub E' 8. (Once amended) The method of claim 7, wherein the first set of digital
2 signals comprises a data signal which is received in either serial or parallel
3 form, the data signal being converted to serial form when received in parallel
4 form.

Sub B
Cont
A' 9. (Once amended) The method of claim 7, wherein a plurality of digital signals
2 in the first set of digital signals are transmitted as digital signals in the second
3 set of digital signals separately at different times.

Sub E' 10. (Once amended) The method of claim 7, wherein at least one transmitted
2 digital signal from the second set of digital signals is coupled to at least one pin
3 associated with a coder/decoder (codec) according to an AC97 or I2S signal
4 interface.

Add new claims 11-14 as follows:

Sub E
11. (New) The method of claim 7, wherein the step of transmitting further
comprises transmitting the at least one output signal to at least one
multiplexer at different times.

Sub H
12. (New) The electronic switching apparatus of claim 1, wherein the barrel
shift register is a loadable barrel shift register.

Sub F
13. (New) The electronic switching apparatus of claim 1, further comprising a
plurality of multiplexer modules.

Sub C
14. (New) A system for electronic signal/coupling comprising:
means for receiving a first set of digital signals, the received first set of
digital signals being provided to a plurality of barrel shift registers;
means for shifting and rotating the first set of digital signals; and
means for transmitting a second set of digital signals, the transmitted
second set of digital signals being provided from a plurality of multiplexers, the
plurality of multiplexers being selectably coupled to the barrel shift registers
such that at least one signal selected in the first set of digital signals is
selectably coupled for transmission in the second set of digital signals.